

Amendments to the Drawings

The attached four (4) sheets of drawings include changes to Figs. 1, 2a, 2b, 3, 4a and 6. These four (4) sheets, which includes Figs. 1, 2a, 2b, 3, 4a and 6, replace the original four (4) sheets that include those same Figures.

DESCRIBE CHANGE

Figs. 1, 2a, 3 and 4 have been provided with the legend "CONVENTIONAL ART," and Figs. 1, 2a, and 2b have been re-labeled to correctly show features described in the specification.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1 and 3-15 are now present in this application. Claim 1 is independent.

Amendments have been made to the Abstract of the Disclosure and specification, claim 2 has been canceled, and claims 1, 3-7, 10, 11 and 13-15 have been amended. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

Priority Under 35 U.S.C. § 119

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. §119, and receipt of the certified priority document.

Information Disclosure Citation

Applicants thank the Examiner for considering the reference supplied with the Information Disclosure Statement filed on May 5, 2004, and for

providing Applicants with an initialed copy of the PTO-1449 form filed therewith.

Abstract of the Disclosure

Applicants have amended the Abstract of the Disclosure in order to place it in better form.

Specification Objection

The Examiner has objected to the specification because of several informalities. In order to overcome this objection, Applicants have amended the specification and, because of the numerous corrections being made, Applicants are submitting a substitute specification for the convenience of the Examiner.

In accordance with MPEP §608.01(q), Applicants herewith submit a substitute specification in the above-identified application. Also included is a marked-up copy of the original specification which shows the portions of the original specification which are being added and deleted. Applicants respectfully submit that the substitute specification includes no new matter and that the substitute specification includes the same changes as are indicated in the marked-up copy of the original specification showing additions and deletions.

Because the number of amendments which are being made to the original specification would render it difficult to consider the case, or to arrange the papers for printing or copying, Applicants have voluntarily submitted this substitute specification. Accordingly, Applicants respectfully request that the substitute specification be entered into the application.

Most of the changes are correction of misspellings. However, the amendment of paragraph [0071] is made to make that paragraph be consistent with what is shown in Fig. 6 and recited in originally filed claim 15, which is part of Applicants' originally filed disclosure. It is well settled that the claims as filed are part of the specification. See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931,938, 15 USPQ2d 1321, 1326 (Fed. Cir. 1990) (the original claims are part of the patent specification); In re Benno, 768 F.2d 1340, 1346, 226 USPQ 683, 686-87 (Fed. Cir. 1985); In re Frey, 166 F.2d 572, 575, 77 USPQ 116, 119 (CCPA 1948), cited in Hyatt v. Boone, 47 USPQ2d 1128, 1130 (Fed. Cir. 1998).

Paragraph [0015] has not been amended as suggested because it is believed to be accurate as it stands and this paragraph is a general description, not referring to a specific figure.

Applicants have canceled claim 2, thereby obviating the objection to the specification relating thereto. However, Applicants respectfully note that

because claim 2 is an original claim, it is part of the specification as originally filed.

Reconsideration and withdrawal of this objection are respectfully requested.

Drawing Objections

The Examiner has objected to the drawings for several reasons. In order to overcome this objection, Applicants have amended Figs. 1, 2a, 3 and 4a by providing the legend "CONVENTIONAL ART." Support for this is found in the main body of Applicants' specification, which clearly describes these figures as showing conventional CRTs. In addition, various labels have been added to Figs. 1, 2a, 2b, and 6, and label 28 has been changed to "X" in Figs. 2a and 2b. With respect to the objection to Fig. 6 and the parameter Ts, Applicants have amended the specification to be consistent with Fig. 6 and originally filed claim 15, in this regard. Also, Figs. 2a and 2b have been amended to show deflection axis X and deflection center C.

Applicants respectfully submit that the amendments to the drawings overcome these objections. Reconsideration and withdrawal of this objection to the drawings is respectfully requested.

Rejection Under 35 U.S.C. § 102

Claims 1-6 and 12-14 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,155,411 to Swank et al. ("Swank"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

During patent examination, the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). This burden can be satisfied when the PTO presents evidence, by means of some teaching, suggestion or inference either in the applied prior art or generally available knowledge, that would have appeared to have suggested the claimed subject matter to a person of ordinary skill in the art or would have motivated a person of ordinary skill in the art to combine the applied references in the proposed manner to arrive at the claimed invention. See Carella v. Starlight Archery Pro Line Co., 804 F.2d 135, 140, 231 USPQ 644, 647 (Fed. Cir. 1986); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); In re Rinehart, 531 F.2d 1048, 1051-1052, 189 USPQ 143, 147 (CCPA 1976).

If the PTO fails to meet this burden, then the Applicants are entitled to the patent. However, when a *prima facie* case is made, the burden shifts to the Applicants to come forward with evidence and/or argument supporting patentability. Patentability *vel non* is then determined on the entirety of the record, by a preponderance of evidence and weight of argument, *Id.*

A prior art reference anticipates the subject matter of a claim when that reference discloses every feature of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and Hazani v. Int'l Trade Comm'n, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed Cir. 1997). While, of course, it is possible that it is inherent in the operation of the prior art device that a particular element operates as theorized by the Examiner, inherence may not be established by probabilities or possibilities. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

Swank's thickened projection 42, which Swank identifies as a "quantity of glass 42" is disclosed as being "positioned adjacent to and immediately forward of the location of the yoke 30" (col. 3, lines 9-28). In other words, Swank's body of glass, which may be in the form of an annular ring (col. 3, lines 9-28) is not located on Swank's yoke plane, but is adjacent to Swank's yoke plane on the

screen side of the yoke plane. The purpose of Swank's glass quantity 42 is to absorb x-rays that are not absorbed by Swank's shortened yoke.

Claim 1, as amended, positively recites that the thickness projection of the funnel body portion extends on both sides of the yoke plane. Swank does not disclose such a feature. Nor would it be obvious to provide such a feature in Swank, because Swank's yoke absorbs x-rays in the side of the yoke plane near the electron gun. One of ordinary skill in the art would have no motivation to provide thickened glass to absorb x-rays where the yoke absorbs x-rays.

Accordingly, claim 1, as amended, is not anticipated by (nor rendered obvious by) Swank. Claims 3-6 and 12-14 also depend from claim 1 and patentably define over the applied art at least for this reason.

Reconsideration and withdrawal of this rejection are respectfully requested.

Rejections under 35 U.S.C. §103

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Swank in view of U.S. Published Patent Application 2002/0185959 to Sugawara et al. This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

The Office Action admits that Swank's projection (glass quantity 42) does not increase in thickness going from the neck portion to the seal line plane. In

order to remedy this deficiency, the Office Action turns to Sugawara. Whereas Swank disclosed a circa 1991 curved display faceplate panel type CRT, Sugawara discloses a circa 2001 flat display faceplate panel type CRT.

Sugawara's funnel thickness is specified only in terms of a thickness range in paragraph [0015] and the specific thickness taper of Sugawara's funnel wall shown in Figs. 1 and 3 is not mentioned in the specification (main body or claims portion). So, any disclosure of this taper may be due to draftsman license.

In any event, the reason that Swank, the main reference, provides the thickened glass ring, is to absorb x-rays that are not absorbed by the short yoke. Sugawara has nothing to do with this issue. So the fact that Sugawara shows a particular CRT funnel thickness taper is not relevant to this issue and one of ordinary skill in the art would not be motivated to look to Sugawara to modify an x-ray absorber thickness profile, especially when Sugawara does not even discuss a specific taper in its specification.

Moreover, because electron intensity generally falls off with distance from an electron source, x-ray emission will probably fall off with distance, also. As a result, it would appear logical to reduce the thickness of the funnel body/wall projection the farther one goes away from the electron beam source.

Accordingly, the Office Action fails to make out a *prima facie* case of proper motivation to one of ordinary skill in the art to modify Swank, as suggested.

Reconsideration and withdrawal of this rejection are respectfully requested.

Allowable Subject Matter

The Examiner states that claims 8-11 and 15 would be allowable if rewritten in independent form.

Applicants thank the Examiner for the early indication of allowable subject matter in this application. Applicants have not re-written these claims in independent form, however, because of Applicants' belief that claim 1, from which these claims depend, is allowable for reasons stated above.

Additional Cited References

Since the remaining reference cited by the Examiner has not been utilized to reject the claims, but has merely been cited to show the state of the art, no comment need be made with respect thereto.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be

withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8076, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

Applicants respectfully petition under the provisions of 37 C.F.R. § 1.136(a) and § 1.17 for a three-month extension of time in which to respond to the Examiner's Office Action. The Extension of Time Fee in the amount of \$1,020.00 is attached hereto.

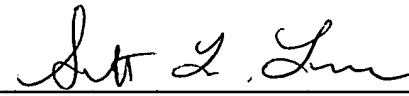
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By: 

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Attachment: Replacement Drawing Sheets
Annotated Drawing Sheets
Abstract of the Disclosure
Substitute Specification (with marked-up copy)